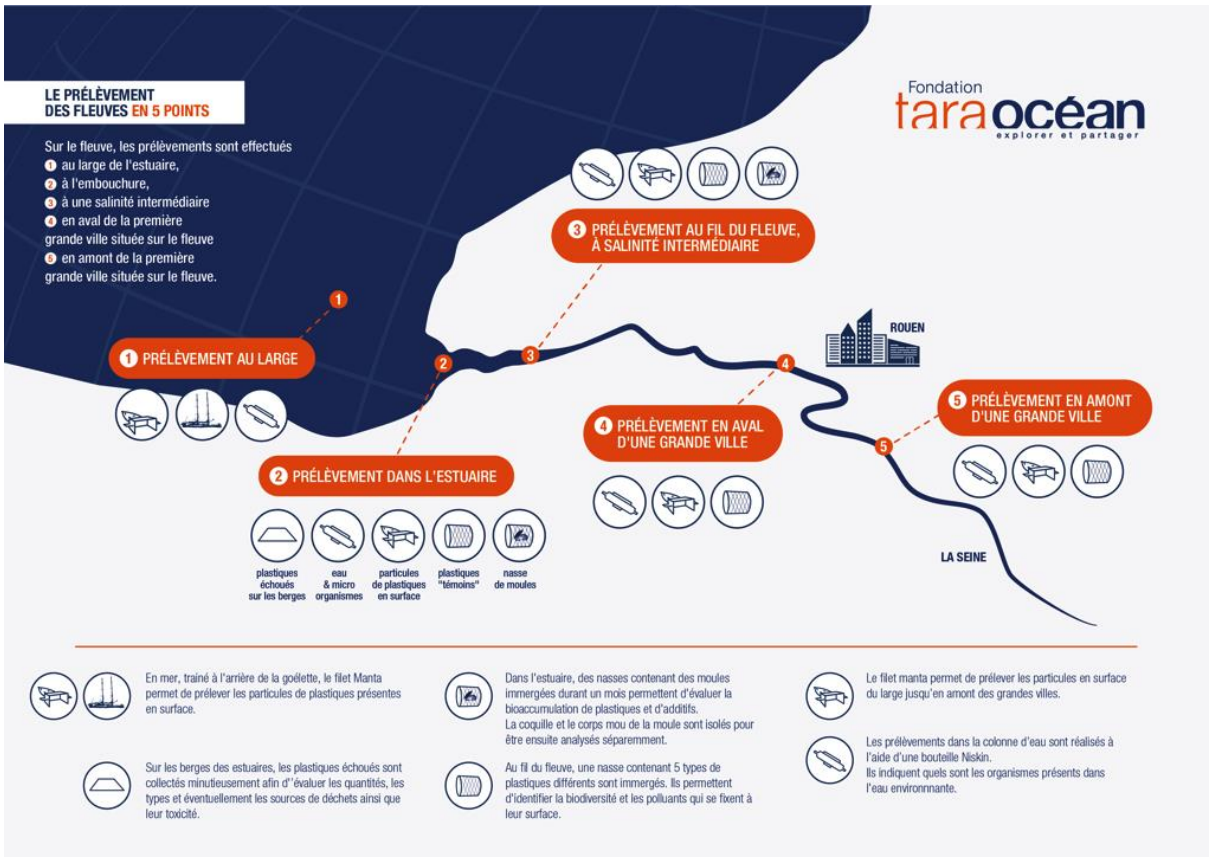
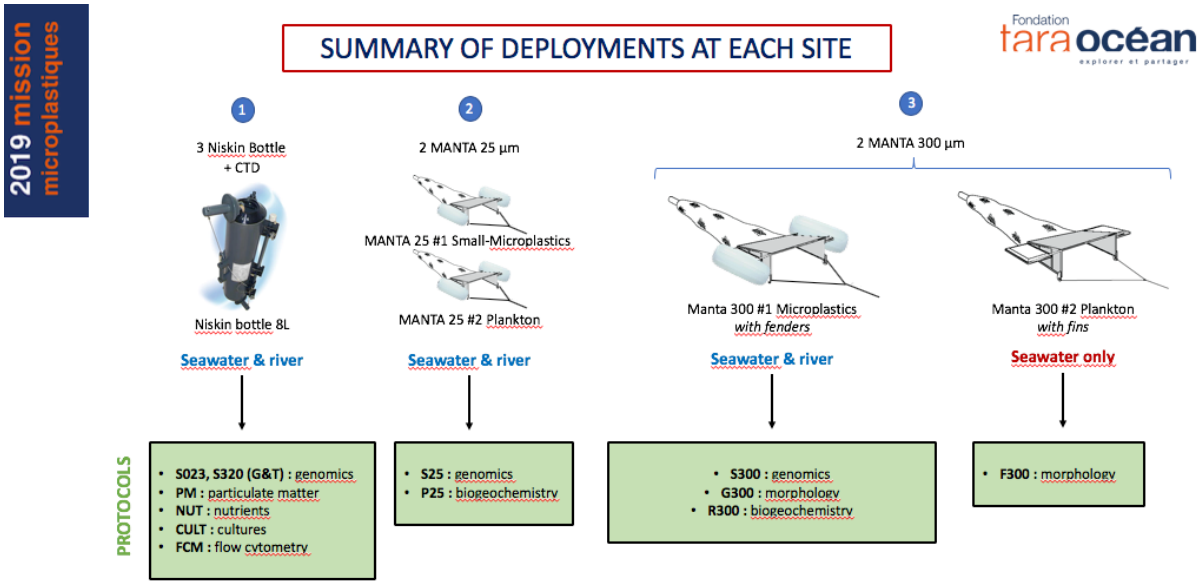
TARA_	YYYY	MM	DD	PORT (CITY)	**LAT** DD	MM.MMM	**LONG** DDD	MM.MMM
Start	2019	06	10	LONDON	N	51	30.4	W	000	04.2
End	2019	06	13	LONDON	N	51	30.4	W	000	04.2

CAMPAIGN OBJECTIVE

The objective of this campaign was to describe the sources of plastic pollution in rivers and its fate at sea and to evaluate the impact on plastic particles on biodiversity. During the cruise, we visited 5 sites in the Thames river: at sea (site 1), at the estuary (site 2), close to the estuary but with lower salinity (site 3), and then downstream (site 4) and upstream the city of London.

A set of samples were taken at each stations:
-**water** was sampled with Niskin bottles and plastic particles from manta trawl with nets of 330- and 25-microns from boats (Research vessel Tara at sea and from smaller boat in the river),
-**plastic pieces** and **mussel** were putted in cages one month before the arrival of R/V Tara and they were sampled during this campaign from the 5 sites from sea beaches and river banks in order to evaluate the colonisation by microorganisms during one month on several types of plastics and the impact of plastics on mussels as model organisms,
-**macro- and micro-plastics** samples on beach and on river banks using the European Ospar protocol.





PARTICIPANTS

	ROLE	NAME, Surname, Affiliation
1	CREW- Captain	Martin Hertau
2	CREW- 1st Officer	Nicolas BIN
3	CREW- Chief engineer	Charlene Gicquel
4	CREW- Deck chief	Mattieu Oriot
5	CREW-	Lucas BLIJDORP
6	CREW- Cook	Sophie Bin
7	CREW- Media	Noelie Pansiot
8	GUEST	
9	GUEST	Marie Lecuyer
10	SCIENCE- Chief Scientist	Jean-François Ghiglione
11	SCIENCE	Alexandra ter Halle
12	SCIENCE-	Stephane Pesant
13	SCIENCE- Field team	Valérie Barbe
14	SCIENCE- Field team	Leila Meistertzhiem
15	SCIENCE- Field team	Boris Eyheraguibel
16	SCIENCE- Field team	Nina Luckas

ENVIRONMENTAL CONTEXT

Tara was located at Sainte Katharine Docks Marina, during the stopover in London. The boat arrived in London on June 11 but the sampling started on June 10 with sites 1 (seawater) and site 2 (estuary) carried out directly from Tara during the ascent of the Thames. The site 3 was performed using a small embarkation and the site 4 from the river bank.

Site TAM S01:
Date: June 10th
Time: 11:51 a.m. on site
location: Sea (TARA)
GPS coordinates:N 51°27.218N 1°27.650E

Site TAM S02:
Date: June 10th
Time: 7:21 p.m. on site
location: Estuary (TARA)
GPS coordinates:N 51°30.225N 0°41.625E

Site TAM S03:
Date: June 11th
Time: 8:08 p.m. on site
location: Greenhithe (Zep)
GPS coordinates:N 51°27.763N 0°15.560E

Site TAM S04:
Date: June 12th
Time: 9:57 a.m. on site
location: Twickenham Bridge (Richmond) : Bridge/Pontoon
GPS coordinates:N 51°27.603N 0°18.872W

MAJOR ACHIEVEMENTS & SCIENTIFIC INTERESTS

This campaign managed to achieve the complete set of protocols at the five sites. The plastics of the cage were conditioned by the field team. All the cages were recovered on all sites. The number of microplastic fragments sorted after the 330 manta trawl was higher in sites 3 and 4. We ended with 305 samples (mainly plastics) that were kept in liquid nitrogen or in freezer and then sent to partner laboratories ones back to France.

CONCERNS & ACTIONS TO TAKE

We have no specific concern or actions to take since our analysis are just beginning. We are expected to analyse all the samples taken from this expedition within 2 years after the sampling period, by using a multidisciplinary approach including chemical, physical and biological analysis made by the 15 partner laboratories. The analysis of these data with be compared to 8 other river-sea continuum in Europe (Thames, Elba, Rhine, Seine, Loire, Gironde, Ebro, Rhône) and published in scientific peer-review journals.

SUMMARY OF ACTIVITIES

0##	R##	S##	Date (Z=UTC) YYYYMMDDZ	Latitude	Longitude	Niskin & CTD	Manta 25	Manta 25-P	Manta 300	Manta 300-P	Trucker Trawl	ON SHORE			MUSSELS		PLASTIC
												QUAD	HPK	SED	CTRL	CAGE	CAGE
	TAM	1	2019-06-09	N 51°27.218	E 1°27.650	X	X	X	X	X		X			?	?	X
	TAM	2	2019-06-09	N 51°30.225	E 0°41.625	X	X	X	X						?	?	X
	TAM	3	2019-06-10	N 51°27.763	E 0°15.560	X	X	X	X			X	X			?	X
	TAM	4	2019-06-11	N 51°27.603	W 0°18.872	X	X	X	X							?	X

INVENTORY OF SAMPLES COLLECTED DURING THE CAMPAIGN

Storage T°C Box size Chemical	+10-40 BOX	+10-40 INCUB	+10-40	+4 DRAWER formol	+4	-20 tray	-20 bags	-20 barquette	-20 L	-20 M	-20 M Gluta	-20 S gluta	LN2
FCM (cryo 2mL)	0	0	0	0	0	0	0	0	0	0	0	12	0
NUT (bottle 20 mL)	0	0	0	0	0	4	0	0	0	0	0	0	0
PM (petri slide)	0	0	0	0	0	0	0	0	0	4	0	0	0
CULT (bottle 250 mL)	0	0	0	0	0	0	0	0	0	0	0	0	0
S023 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	0	8
S325 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	0	8
S25 (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	0	0	4
P25 (jar 1 L)	4	0	0	0	0	0	0	0	0	0	0	0	0
S300 (cryo 2 mL)	0	0	0	0	0	0	0	0	0	0	0	0	126
G300 (cryo 2 mL)	0	0	0	0	0	0	0	0	0	0	0	43	0
R300 (petri + falcon)	0	0	0	0	0	0	1	0	0	15	0	0	0
F300 (bottle 250 mL)	0	0	0	1	0	0	0	0	0	0	0	0	0
HPB (barquette)	0	0	0	0	0	0	8	4	0	0	0	0	0
HPS (cryo 5 mL)	0	0	0	0	0	0	0	0	0	11	0	0	0
HPK (Falcon 50 mL)	0	0	0	0	0	0	0	0	0	0	0	0	0
MBO (Falcon 50 mL)	0	0	0	0	0	0	0	0	5	0	0	0	0
TOX (Falcon 50 mL)	0	0	0	0	0	0	0	0	8	0	0	0	0
CG (Falcon 50 mL)	0	0	0	0	0	0	0	0	20	0	0	0	0
CGG (cryo 5 mL)	0	0	0	0	0	0	0	0	0	0	20	0	0
SED (Falcon 50 mL)	0	0	0	0	0	0	0	0	0	0	0	0	0
MUSS (Ziploc)	0	0	0	0	0	0	0	0	0	0	0	0	0
MUST (papillottes)	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL (305 samples)	4	0	0	1	0	4	9	4	32	30	20	55	146